BRUHAT BENGALURU MAHANAGARA PALIKE

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Terms of Reference

General Conditions:

10 Nos Six Wheeler towing vehicles with Hydraulic jaws are required for towing medium and light vehicles like cars, three wheelers , auto rickshaws and two wheelers in Bangalore city, BBMP Limits

1. The categories of vehicles which are required to be towed are as follows;
   a) Medium transport vehicle.
   b) Light motor vehicles including cars, 3 wheelers, tempos and autorickshaws.
   c) Two wheelers.
2. The tenderer should mention proper type of towing vehicle, which he intends to provide.
3. All the staff of the towing vehicle should be provided with navy blue uniform and name plate at all time when they are on duty.
4. The eligible bidders who fulfill the above conditions may submit their e-tenders mentioning the lowest rates along with necessary EMD by logging in to e-procurement website https://kppp.karnataka.gov.in/
5. One driver, one cleaner, 2 crane boys should be employed by successful tenderers in each towing vehicle. They should work under the direction of In- Charge Traffic Officer allotted to towing vehicle. They should lift vehicles which are found parked in the "No parking area" and the vehicles involved in road accidents etc.
6. Towing vehicle should be painted in Yellow Color and successful bidders should install Road safety awareness and Fine amount particulars Stickers in their own cost. Details will be provided by this office.
7. Towing vehicle should have provision for Toolbox, first aid box, backside seating provision, public announcement system with siren, Headlamp, cones and chains, reflectors.

8. The towing vehicles should be fitted with 2 PA systems of 30 Watts. One fitted to the front other facing rear compulsorily.
9. The tenderer should deploy two video cameras with minimum 20 days continues recording front and rear side to record the entire proceedings of the towing operations.
10. The towing vehicles should tow the vehicles between 7-00 a.m to 10-00 p.m on all the days.
11. The owner of the towing vehicle is held responsible for the damage caused to the vehicle during course of towing a vehicle.

TECHNICAL SPECIFICATION OF TOWING VEHICLES

Quantity - 10 Nos

1. Six wheeler Towing vehicle with Chassis of 11Ft x 6.5 Ft
2. Tow away truck with power steering/mechanical.
3. Capable of towing cars of all wheel size by hydraulic lifting.
4. Lifting cars up to 3 tons.
5. Lifting height should be adequate to suitably tow the vehicle.
6. Tow rating 6250 lbs.
7. Self loading wheel lift.
8. Hydraulic technology for both front tires.
9. Safety belt, rear strip, ratchet and strap combo, wrap around axle, spacer blocks.
10. Provision for Toolbox, first aid box, backside seating provision, public announcement system with siren, Headlamp, cones and chains, reflectors.

Camera Specification:

Dome Sensor Unit for surveillance indoors, outdoors, and in vehicles. Easy-to-install, vandal-resistant recessed dome sensor unit for discreet surveillance indoors, outdoors ,and in vehicles. The rugged sensor unit should withstand dust, rain, snow, vibration, shock and impact provides a 1080p resolution and a wide 110° horizontal field of view.

It enables WDR – Forensic Capture, ideal for scenes with very bright and dark areas. Comes with a 12-m (39 ft.)pre-mounted cable for connection to a main unit. A rotation tool to be supplied for leveling the image.

Camera specification

- **Image sensor** 1/2.8" (effective) progressive scan RGB CMOS
- **Lens 2.8 mm, F2.0**
  With F34/F41/F44, 1080p
  Horizontal angle of view: 110°
  Vertical angle of view: 61°
  With F34/F44, 720p
  Horizontal angle of view: 71°
  Vertical angle of view: 40°
- **Resolution Max. 1920x1200/1080**
- **Wide dynamic range,** WDR - Forensic Capture
  With F41: 1080p, 25/30 fps (50/60 Hz)

With F44: 720p, 12.5/15 fps (50/60 Hz)

- **Minimum illumination, Color:** 0.3 **lux**
- **Shutter time:**
  HDTV 1080p 25/30/50/60 fps: 1/143000 s to 2 s WUXGA (1920x1200) 25/30 fps: 1/143000 s to 2 s
  With F34/F44:
  1080p 12.5/15 fps: 1/22500 s to 2 s HDTV 720p 25/30 fps: 1/28000 s to 2 s
- **Frame rate Max. 50/60 fps (50/60 Hz)**
- **Camera angle adjustment**
  Tilt: 120°, Rotation: 90°
- **General**
  Casing IK09- and IP66-rated plastic casing
- **Operating conditions,** -30 °C to 55 °C (-22 °F to 131 °F)
- **Humidity 10-100% RH (condensing)**
- **Storage conditions,** -40 °C to 65 °C (-40 °F to 149 °F)
- **Approvals ECE R10 rev.04, EN 50121-4, IEC/EN/UL 60950-1,**
  IEC 60068-2-1 , IEC 60068-2-2, IEC 60068-2-14, IEC 62262 IK09, IEC/EN/UL 60950-22
- **Dimensions Depth: 38 mm (1 1/2 in)**
  0 112 mm (1/6 in) 12-m (39 ft) cable
- **Weight 590 g (1.3 lb)**
- **Required hardware**
  F34/F41/F44 Main Unit

Main unit for CCTV -Technical Specifications

It should support at least four Sensor Units for surveillance of four closely situated areas. This enables a cost effective, highly discreet solution for multi-view surveillance, allowing simultaneous streaming of 1080p or HDTV 720pvideos from four different areas through one Ethernet port. Quad view streaming is also supported. The unit must offers wide dynamic range capability for handling scenes with high- contrast lighting. With Zip stream technology, provides a more efficient video compression, enabling lower bandwidth and storage use. It has two SD card slots for local storage of recordings and supports Power over Ethernet and 8-28 V DC.

- **Video compression,** H.264 (MPEG-4 Part 10/AVC) Baseline, Main and High Profiles, Motion JPEG
- **Resolution** 1920x1080 (1080p)a to 480x270 , 1280x720 to 480x270
- **Wide dynamic range,** Dynamic Contrast
- **Frame rate in 1080p: up to 12.5/15 fps (50/60 Hz),** In 720p: up to 25/30 fps (50/60 Hz)
- **Video streaming Multiple, individually configurable streams in H.264 and Motion JPEG**

Zip stream technology in H.264, Controllable frame rate and bandwidth, VBR/MBR H.264
Quad view, max 1080p resolution, 25/30 fps (50/60 Hz) with 720p capture mode12.5/15 fps (50/60 Hz) with 1080p capture mode

- **Image settings**

Compression, color, brightness, sharpness , contrast, white balance, exposure value, exposure control, exposure zones, local contrast, rotation, Corridor Format, text and image overlay, privacy mask, mirroring of images, Wide Dynamic Range - Dynamic Contrast

- **Network, Security**

Password Protection, IP address filtering, HTTPSb encryption, IEEE 802.1Xb network access control, Digest authentication, User access log, Centralized Certificate Management

- **System integration**
- **Analytics Included,** Video Motion Detection Supported, Cross Line Detection, Digital Auto tracking Support for Camera Application Platform enabling installation of third-party applications

Public Address System with Siren: Megaphones with 30W Power Output, Built in Siren,

1. Voice Range 600 to 800 mtrs
2. Megaphone Modes: Talk + Siren Alarm
3. Convenient Coiled-Cord Handheld Microphone
4. Adjustable Volume Control
5. Simple Button Control Operation
6. High-Powered Audio Reproduction
7. Wide Bell Diameter for Extended Projection
8. Ergonomic Pistol Grip & Lightweight Chassis
9. Battery Operated
10. Power Supply Jack: DC 12V Adapter Connector
11. Close-to-lip speaking to avoid background noise.
12. Easy for extension of wire length.